**R16**

# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
### B.Tech II Year I Semester Examinations, November/December - 2017
## OBJECT ORIENTED PROGRAMMING THROUGH JAVA
### (Common to CSE, IT)

Time: 3 Hours                                                                                   Max. Marks: 75

**Note:** This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit.
Each question carries 10 marks and may have a, b, c as sub questions.

## PART- A
(25 Marks)

1.a) Differentiate between print() and println() methods in Java. [2]
 b) What are symbolic constants? Explain with examples. [3]
 c) What are the methods available in the character streams? [2]
 d) What is the significance of the CLASSPATH environment variable in creating/using a package? [3]
 e) What is the difference between error and an exception? [2]
 f) What is synchronization and why is it important? [3]
 g) What is the significance of Legacy class? Give example. [2]
 h) What is the purpose of String Tokenizer class? Explain. [3]
 i) What are the differences between JToggle button and Radio button? [2]
 j) What is an adapter class? Explain with an example. [3]

## PART-B
(50 Marks)

2.a) What is meant by byte code? Briefly explain how Java is platform independent.
 b) Explain the significance of public, protected and private access specifiers in inheritance. [5+5]

**OR**

3.a) Explain different parts of a Java program with an appropriate example.
 b) How does polymorphism promote extensibility? Explain with example. [5+5]

4.a) Explain the process of defining and creating a package with suitable examples.
 b) Give an example where interface can be used to support multiple inheritance. [5+5]

**OR**

5.a) What is the accessibility of a public method or field inside a nonpublic class or interface? Explain.
 b) Describe the process of importing and accessing a package with suitable examples. [5+5]

6.a) Differentiate between Checked and UnChecked Exceptions with examples.
  b) Write a program to create four threads using Runnable interface. [5+5]

**OR**

7.a) What are the different ways to handle exceptions? Explain.
  b) How many ways are possible in java to create multiple threaded programs? Discuss the differences between them. [5+5]

8.a) Differentiate between ArrayList and a Vector? Why ArrayList is faster than Vector? Explain.
  b) How an Hashtable can change the iterator? Explain. [5+5]

**OR**

9.a) Explain the Bit Set and Calander classes in detail.
  b) Discuss the differences between HashList and HashMap, Set and List. [5+5]

10.a) List and explain different types of Layout managers with suitable examples.
  b) How to move/drag a component placed in Swing Container? Explain. [5+5]

**OR**

11.a) Discuss about different applet display methods in brief.
  b) What are the various components of Swing? Explain. [5+5]

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